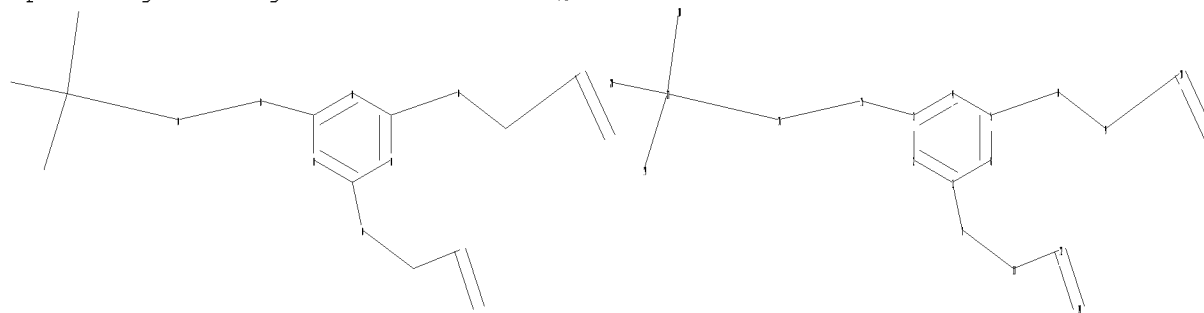


STN-10581863

Uploading C:\Program Files\STNEXP\Queries\triazine.str



```
chain nodes :
7  8  9 10 11 12 13 14 15 16 17 18 19 20
ring nodes :
1  2  3  4  5  6
chain bonds :
1-7  3-15  5-8  7-11  8-9  9-10 10-13 11-12 12-14 15-16 16-17 17-18 17-19
17-20
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
1-7  3-15  5-8  7-11  8-9  16-17
exact bonds :
9-10 10-13 11-12 12-14 15-16 17-18 17-19 17-20
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6
```

```
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS
```

L1        STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1        STR

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

Structure attributes must be viewed using STN Express query preparation.

STN-10581863

=> s l1 sss sam

SAMPLE SEARCH INITIATED 11:25:20 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1 TO 80

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 11:25:28 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 22 TO ITERATE

100.0% PROCESSED 22 ITERATIONS

6 ANSWERS

SEARCH TIME: 00.00.01

L3 6 SEA SSS FUL L1

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

186.36

187.68

FILE 'REGISTRY' ENTERED AT 11:25:41 ON 11 FEB 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 9 FEB 2009 HIGHEST RN 1103577-63-4

DICTIONARY FILE UPDATES: 9 FEB 2009 HIGHEST RN 1103577-63-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

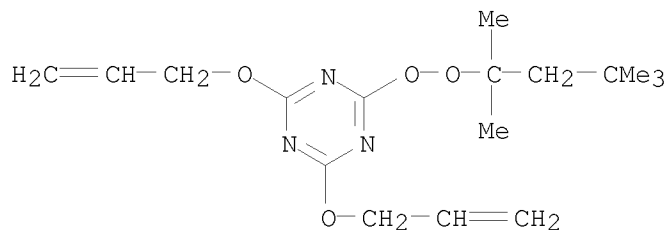
=> d scan

L3 6 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN 1,3,5-Triazine, 2,4-bis(2-propen-1-yloxy)-6-[(1,1,3,3-  
tetramethylbutyl)dioxy]-

MF C17 H27 N3 O4

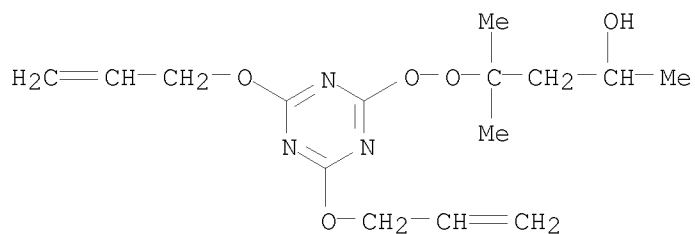
STN-10581863



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 6 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN 2-Pentanol, 4-[[4,6-bis(2-propen-1-yloxy)-1,3,5-triazin-2-yl]dioxymethyl]-  
methyl-  
MF C15 H23 N3 O5

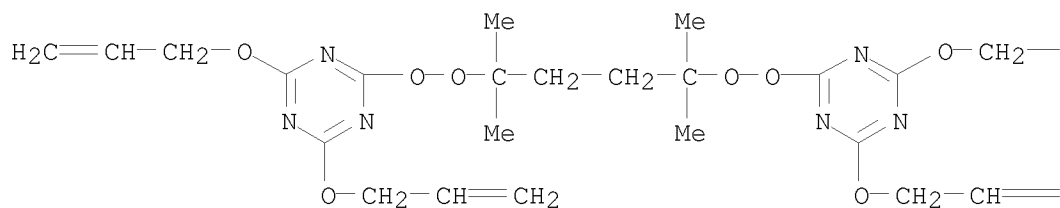


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 6 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN 1,3,5-Triazine, 2,2'-[(1,1,4,4-tetramethyl-1,4-butanediyl)bis(dioxy)]bis[4,6-bis(2-propenyloxy)- (9CI)  
MF C26 H36 N6 O8

PAGE 1-A



STN-10581863

PAGE 1-B

—CH=CH<sub>2</sub>

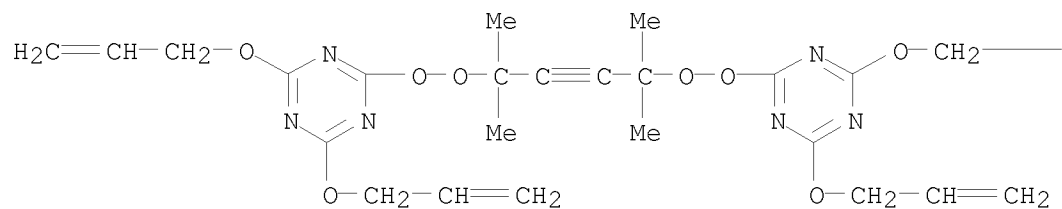
=CH<sub>2</sub>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 6 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN 1,3,5-Triazine, 2,2'-[(1,1,4,4-tetramethyl-2-butyne-1,4-  
diyl)bis(dioxy)]bis[4,6-bis(2-propenyloxy)- (9CI)  
MF C26 H32 N6 O8

PAGE 1-A



PAGE 1-B

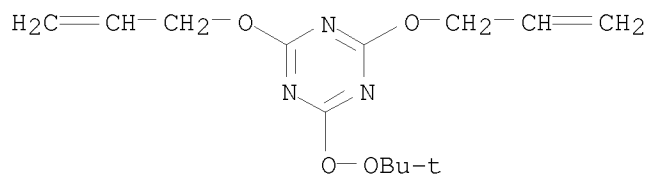
—CH=CH<sub>2</sub>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 6 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN 1,3,5-Triazine, 2-[(1,1-dimethylethyl)dioxy]-4,6-bis(2-propen-1-yloxy)-  
MF C13 H19 N3 O4

STN-10581863



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

1.44

189.12

FILE 'CAPLUS' ENTERED AT 11:27:29 ON 11 FEB 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 11 Feb 2009 VOL 150 ISS 7

FILE LAST UPDATED: 10 Feb 2009 (20090210/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 7 L3

=> d ibib abs hitstr 1-7

L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1455874 CAPLUS <<LOGINID::20090211>>

TITLE: Multifunctional peroxide as alternative crosslink agents for dynamically vulcanized epoxidized natural rubber/polypropylene blends

STN-10581863

AUTHOR(S): Thitithammawong, A.; Nakason, C.; Sahakaro, K.;  
Noordermeer, J. W. M.

CORPORATE SOURCE: Center of Excellence in Natural Rubber Technology,  
Department of Rubber Technology and Polymer Science,  
Faculty of Science and Technology, Prince of Songkla  
University, Pattani, 94000, Thailand

SOURCE: Journal of Applied Polymer Science (2009), 111(2),  
819-825  
CODEN: JAPNAB; ISSN: 0021-8995

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

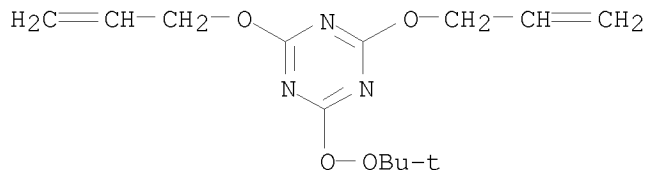
LANGUAGE: English

AB Commonly used dicumyl peroxide (DCP) in combination with coagent, triallyl  
cyanurate (TAC), as a crosslinking agent is well acceptable for  
dynamically vulcanized rubber phase of thermoplastic vulcanizates (TPVs).  
However, it generally produces volatile decomposition products, which cause a  
typical unpleasant smell and a blooming phenomenon. In this work,  
influence of two types of multifunctional peroxides:  
2,4-diallyloxy-6-tert-butylperoxy-1,3,5-triazine (DTBT) and  
1-(2-tert-butylperoxyisopropyl)-3-isopropenyl benzene (TBIB), on  
properties of TPVs based on epoxidized natural rubber (ENR)/polypropylene  
(PP) blends were investigated. The conventional peroxide/coagent  
combinations, i.e., DCP/TAC and tert-Bu cumyl peroxide (TBCP)/ $\alpha$ -Me  
styrene ( $\alpha$ -MeS) were also used to prepare the TPVs for a comparison  
purpose. The TPVs with multifunctional peroxide, DTBT, provided good  
mech. properties and phase morphol. of small dispersed vulcanized rubber  
domains in the PP matrix which were comparable with the DCP/TAC cured  
TPVs. However, the TPVs with TBIB/ $\alpha$ -MeS and TBCP/ $\alpha$ -MeS showed  
comparatively low values of the tensile properties as well as rather large  
phase morphol. The results were interpreted by three main factors: the  
kinetic aspects of the various peroxides, solubility parameters of resp.  
peroxide/coagent combinations in the ENR and PP phases, and the tendency  
to form unpleasantly smelling byproducts.

IT 115413-46-2, 2,4-Diallyloxy-6-tert-butylperoxy-1,3,5-triazine  
RL: MOA (Modifier or additive use); USES (Uses)  
(ultifunctional peroxide as alternative crosslinking agents for  
dynamically vulcanized epoxidized natural rubber/polypropylene blends)

RN 115413-46-2 CAPLUS

CN 1,3,5-Triazine, 2-[(1,1-dimethylethyl)dioxy]-4,6-bis(2-propen-1-yloxy)-  
(CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1033430 CAPLUS <<LOGINID::20090211>>

DOCUMENT NUMBER: 143:461504

TITLE: Dynamically vulcanized PP/EPDM blends by  
multifunctional peroxides: Characterization with

STN-10581863

AUTHOR(S): various analytical techniques  
Datta, S.; Naskar, K.; Jelenic, J.; Noordermeer, J. W. M.

CORPORATE SOURCE: Laboratory Deventer, Akzo Nobel Research and Technology Chemicals BV, Deventer, 7400 AA, Neth.

SOURCE: Journal of Applied Polymer Science (2005), 98(3), 1393-1403

CODEN: JAPNAB; ISSN: 0021-8995

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The characterization of peroxide-cured PP/EPDM TPVs using various spectroscopic techniques is difficult. These techniques are most suited for anal. of solns., while the PP-phase does not dissolve in common organic solvents at room temperature. To obtain more insight into the chemical and reactivity involved between the multifunctional peroxides and EPDM rubber, several characterization techniques were employed. In the present investigation, FTIR, GC-(FID + MS); HP-SEC, and element anal. were used to characterize the multifunctional peroxides TBIB and DTBT, before and after the dynamic curing of the EPDM phase. The decomposition products obtained from these multifunctional peroxides are most likely grafted onto the EPDM-rubber, thereby reducing their volatility and avoiding the common unpleasant smell.

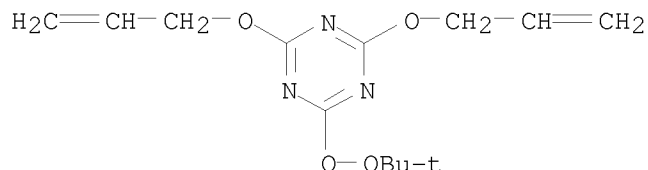
IT 115413-46-2, 2,4-Diallyloxy-6-tert-butylperoxy-1,3,5-triazine

RL: CAT (Catalyst use); USES (Uses)

(characterization of multifunctional peroxides before and after curing of epdm phase in vulcanized blends)

RN 115413-46-2 CAPLUS

CN 1,3,5-Triazine, 2-[(1,1-dimethylethyl)dioxy]-4,6-bis(2-propen-1-yloxy)-  
(CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:523546 CAPLUS <<LOGINID::20090211>>

DOCUMENT NUMBER: 143:44882

TITLE: Process for the preparation of a polyolefin thermoplastic elastomeric vulcanizate

INVENTOR(S): Noordermeer, Jacobus Wilhelmus Maria; Naskar, Kinsuk

PATENT ASSIGNEE(S): Stichting Dutch Polymer Institute, Neth.

SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

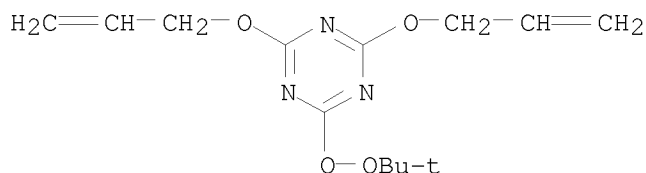
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

WO 2005054360	A2	20050616	WO 2004-NL839	20041202
WO 2005054360	A3	20050825		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2548183	A1	20050616	CA 2004-2548183	20041202
EP 1694765	A2	20060830	EP 2004-808755	20041202
EP 1694765	B1	20070321		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
CN 1914268	A	20070214	CN 2004-80041447	20041202
BR 2004017301	A	20070306	BR 2004-17301	20041202
AT 357479	T	20070415	AT 2004-808755	20041202
JP 2007513235	T	20070524	JP 2006-542517	20041202
ES 2285563	T3	20071116	ES 2004-808755	20041202
MX 2006006390	A	20061211	MX 2006-6390	20060605
KR 2007004558	A	20070109	KR 2006-713199	20060630
US 20070112138	A1	20070517	US 2007-581863	20070103
PRIORITY APPLN. INFO.:			EP 2003-78811	A 20031205
			US 2003-526994P	P 20031205
			WO 2004-NL839	W 20041202
AB	The invention deals with a process for the preparation of a thermoplastic elastomeric vulcanizate, based on a polyolefin and a rubber. The rubber is vulcanized with an organic peroxide having at least one terminal carbon-carbon bond in the mol. As a result, blooming effects are reduced and phys. properties are improved.			
IT	115413-46-2			
	RL: CAT (Catalyst use); USES (Uses)			
	(process for preparation of a polyolefin thermoplastic elastomeric vulcanizate)			
RN	115413-46-2 CAPLUS			
CN	1,3,5-Triazine, 2-[(1,1-dimethylethyl)dioxy]-4,6-bis(2-propen-1-yloxy)-(CA INDEX NAME)			



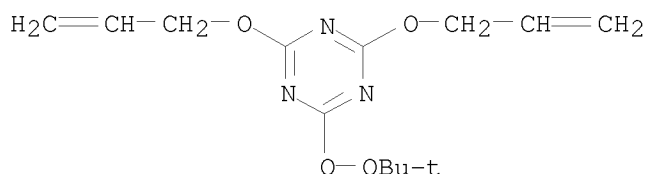
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2005:11231 CAPLUS <<LOGINID::20090211>>  
DOCUMENT NUMBER: 142:431413



STN-10581863

TITLE: Dynamically vulcanized PP/EPDM blends: Multifunctional peroxides as crosslinking agents - part I  
AUTHOR(S): Naskar, Kinsuk; Noordermeer, Jacques W. M.  
CORPORATE SOURCE: Dutch Polymer Institute (DPI), Faculty of Science and Technology Department of Rubber Technology, University of Twente, Enschede, 7500 AE, Neth.  
SOURCE: Rubber Chemistry and Technology (2004), 77(5), 955-971  
CODEN: RCTEA4; ISSN: 0035-9475  
PUBLISHER: American Chemical Society, Rubber Division  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Thermoplastic vulcanizates/dynamic vulcanizates were prepared by mixing polypropylene (Stamylan P 11E10) and EPDM rubber (Keltan P 597) and crosslinking the blend in the presence of multifunctional peroxides. The multifunctional peroxides, such as 1-(2-tert-butylperoxyisopropyl)-3-isopropenylbenzene and 2,4-diallyloxy-6-tert-butylperoxy-1,3,5-triazine, combined structural units of conventional catalysts (dicumyl peroxide) and crosslinking agents ( $\alpha$ -methylstyrene or triallyl cyanurate). Overall, a conventional system comprising triallyl cyanurate (TAC) and dicumyl peroxide (DCP) provided rubber with the best combination of mech. properties. On the other hand, the multifunctional peroxides provided rubber with mech. properties approaching those of the rubber vulcanized in the presence of DCP and TAC, and better than the properties of the rubber vulcanized in the presence of DCP without TAC. Depending on specific requirements, the use of the multifunctional peroxides could be justified. Thus, such vulcanizates were characterized by the absence of smelling volatile byproducts formed by decomposition of the conventional peroxides (e.g. DCP).  
IT 115413-46-2, 2,4-Diallyloxy-6-tert-butylperoxy-1,3,5-triazine  
RL: CAT (Catalyst use); USES (Uses)  
(multifunctional peroxides as catalysts for vulcanization of PP/EPDM thermoplastic rubber blends)  
RN 115413-46-2 CAPLUS  
CN 1,3,5-Triazine, 2-[(1,1-dimethylethyl)dioxy]-4,6-bis(2-propen-1-yloxy)-  
(CA INDEX NAME)



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2004:496063 CAPLUS <<LOGINID::20090211>>  
DOCUMENT NUMBER: 142:220822  
TITLE: Dynamically vulcanized PP/EPDM blends: effects of multifunctional peroxide as crosslinking agents  
AUTHOR(S): Naskar, Kinsuk; Noordermeer, Jacques W. M.  
CORPORATE SOURCE: Dutch Polymer Institute, Faculty of Science and Technology, Dept. of Rubber Technology, University of Twente, Enschede, 7500 AE, Neth.  
SOURCE: Annual Technical Conference - Society of Plastics

STN-10581863

Engineers (2004), 62nd(Vol. 3), 4202-4219  
CODEN: ACPED4; ISSN: 0272-5223

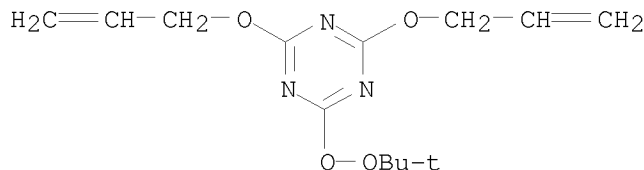
PUBLISHER: Society of Plastics Engineers  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Thermoplastic vulcanizates (TPVs) or dynamic vulcanizates are a special class of thermoplastic elastomers, produced by mixing and crosslinking of a rubber and a thermoplastic polymer simultaneously. In a previous study the use of dicumyl peroxide in combination with triallyl cyanurate as crosslinking agents provide a good overall balance of phys. properties of PP/EPDM TPVs. Commonly used peroxides like dicumyl peroxide generally produce volatile decomposition products, which sometimes provide a typical smell or show a blooming effect. In this paper multifunctional peroxides are described, which reduce the above-mentioned problems. They consist of a peroxide and co-agent-functionality combined in a single mol. The multifunctional peroxides provide properties of TPVs, which are comparable with commonly employed co-agent assisted peroxides. The solubility and kinetic aspects of the various peroxides are highlighted, as well as the decomposition products of the multifunctional peroxides with respect to the avoidance of smelly byproducts. Particularly, 2,4-diallyloxy-6-tert-butylperoxy-1,3,5-triazine turns out for be a very good alternative to the dicumyl peroxide/triallyl cyanurate combination.

IT 115413-46-2, 2,4-Diallyloxy-6-tert-butylperoxy-1,3,5-triazine  
RL: CAT (Catalyst use); USES (Uses)  
(multifunctional peroxide crosslinking agents for PP/EPDM blends)

RN 115413-46-2 CAPLUS

CN 1,3,5-Triazine, 2-[(1,1-dimethylethyl)dioxy]-4,6-bis(2-propen-1-yloxy)-  
(CA INDEX NAME)



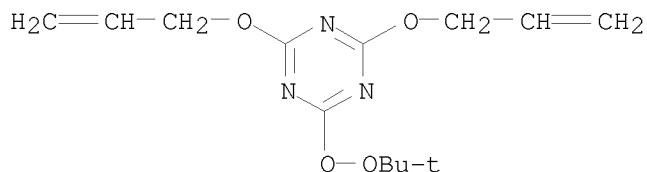
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2004:449991 CAPLUS <<LOGINID::20090211>>  
DOCUMENT NUMBER: 141:261884  
TITLE: Multifunctional peroxides as a means to improve properties of dynamically vulcanized PP/EPDM blends  
AUTHOR(S): Naskar, K.; Noordermeer, J. W. M.  
CORPORATE SOURCE: Enschede, Neth.  
SOURCE: KGK, Kautschuk Gummi Kunststoffe (2004), 57(5), 235-239  
CODEN: KKGKB5; ISSN: 0948-3276  
PUBLISHER: Huethig GmbH & Co. KG  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Thermoplastic elastomers produced by simultaneous mixing and crosslinking of a rubber and a thermoplastic are commonly called thermoplastic vulcanizates (TPVs) or dynamic vulcanizates. Our earlier work has demonstrated that the application of a proper peroxide in combination with

a suitable classical co-agent provides a good overall balance of phys. properties in PP/EPDM TPVs. Commonly used peroxides produce more or less volatile decomposition products, which sometimes possess a typical smell or show a blooming effect or voids formation. Multifunctional peroxides were developed to reduce those problems. They combine peroxide and co-agent-functionality (reactive unsatd. groups) in a single mol. The main objectives of the present work are to show the effects of special kinds of multifunctional peroxides as curing agents on the properties of PP/EPDM TPVs at a fixed blend ratio and to avoid the formation of unpleasant byproducts. The multifunctional ones exhibit more or less comparable properties as co-agent assisted commonly used peroxides. This article focuses on understanding the phenomena in terms of mechanistic and kinetic aspects of the peroxides.

IT 115413-46-2, 2,4-Diallyloxy-6-tert-butylperoxy-1,3,5-triazine  
 RL: CAT (Catalyst use); USES (Uses)  
 (peroxide initiator; multifunctional peroxides as a means to improve properties of dynamically vulcanized PP/EPDM blends)  
 RN 115413-46-2 CAPLUS  
 CN 1,3,5-Triazine, 2-[(1,1-dimethylethyl)dioxy]-4,6-bis(2-propen-1-yloxy)-  
 (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1988:455914 CAPLUS <<LOGINID::20090211>>  
 DOCUMENT NUMBER: 109:55914  
 ORIGINAL REFERENCE NO.: 109:9426h,9427a  
 TITLE: Unsaturated peroxides and their use as crosslinking agents for polymers  
 INVENTOR(S): Verlaan, Johannes Petrus Jozef; Beijleveld, Wilhelmus Maria  
 PATENT ASSIGNEE(S): AKZO N.V., Neth.  
 SOURCE: Eur. Pat. Appl., 9 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 250024	A1	19871223	EP 1987-201068	19870609
EP 250024	B1	19910227		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4855428	A	19890808	US 1987-51753	19870520
JP 63010769	A	19880118	JP 1987-141653	19870608
JP 07051570	B	19950605		
AT 61053	T	19910315	AT 1987-201068	19870609

STN-10581863

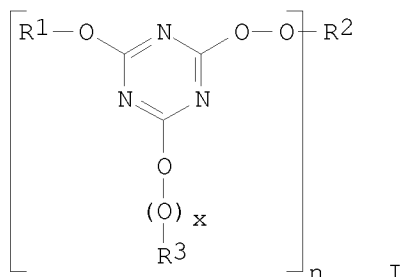
BR 8702945  
PRIORITY APPLN. INFO.:

A 19880308

BR 1987-2945  
NL 1986-1509  
EP 1987-201068

19870610  
A 19860611  
A 19870609

GI



AB The triazine peroxides I (R1 = allyl, methallyl, crotyl; R2 = C4-20 nonarom., C7-20 aromatic group; x = 0, 1; R3 = R1, R2; n = 1, 2) are crosslinking agents for ethylene polymers. Stirring 70% aqueous tert-BuOOH 14, 11% NaOH 40, and 2-chloro-4,6-diallyloxy-1,3,5-triazine 19 g in CH<sub>2</sub>CCl<sub>2</sub> at 35° for 4 h gave 100% 1-(tert-butylperoxy)-4,6-bis(allyloxy)-1,3,5-triazine (II). C<sub>2</sub>H<sub>4</sub>-C<sub>3</sub>H<sub>6</sub> copolymer (100 g) containing 0.01 equivalent II had Elastograph cure time (t<sub>90</sub>, 170°) 10 min, vs. 8 with dicumyl peroxide.

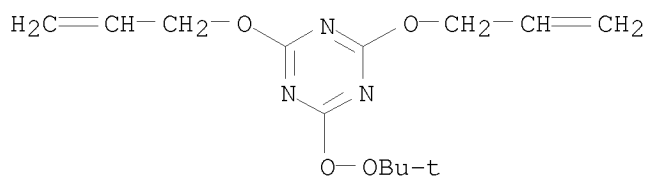
IT 115413-46-2P 115413-47-3P 115413-48-4P  
115413-49-5P 115413-51-9P 115413-52-0P

RL: PREP (Preparation)

(crosslinking agents for polymers, manufacture of)

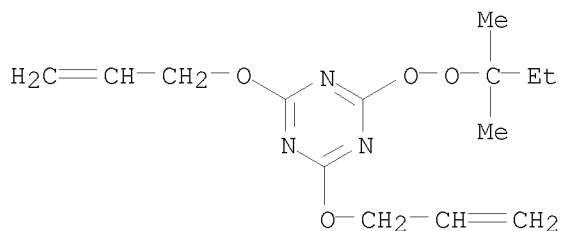
RN 115413-46-2 CAPLUS

CN 1,3,5-Triazine, 2-[(1,1-dimethylethyl)dioxy]-4,6-bis(2-propen-1-yloxy)-  
(CA INDEX NAME)



RN 115413-47-3 CAPLUS

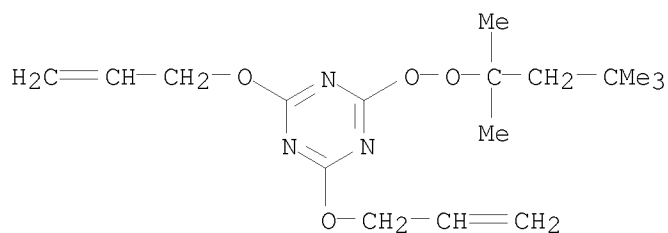
CN 1,3,5-Triazine, 2-[(1,1-dimethylpropyl)dioxy]-4,6-bis(2-propen-1-yloxy)-  
(CA INDEX NAME)



STN-10581863

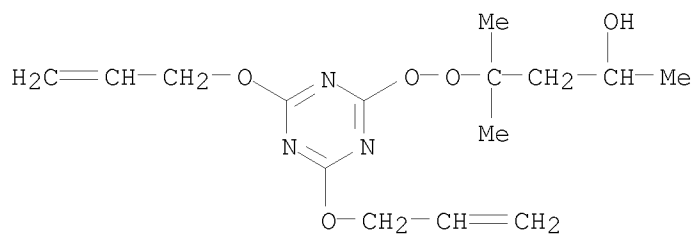
RN 115413-48-4 CAPLUS

CN 1,3,5-Triazine, 2,4-bis(2-propen-1-yloxy)-6-[(1,1,3,3-tetramethylbutyl)dioxy]- (CA INDEX NAME)



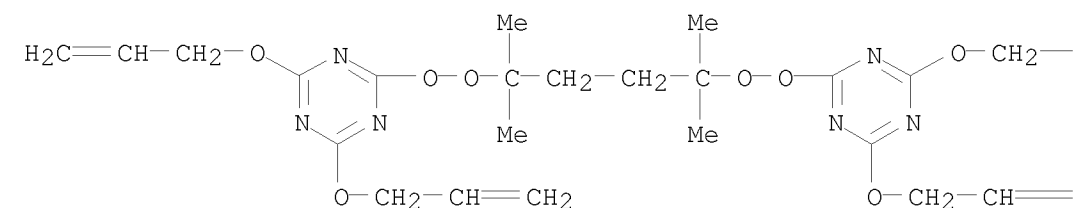
RN 115413-49-5 CAPLUS

CN 2-Pentanol, 4-[[4,6-bis(2-propen-1-yloxy)-1,3,5-triazin-2-yl]dioxy]-4-methyl- (CA INDEX NAME)



RN 115413-51-9 CAPLUS

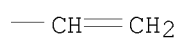
CN 1,3,5-Triazine, 2,2'-[(1,1,4,4-tetramethyl-1,4-butanediyl)bis(dioxy)]bis[4,6-bis(2-propenyloxy)- (9CI) (CA INDEX NAME)



PAGE 1-A

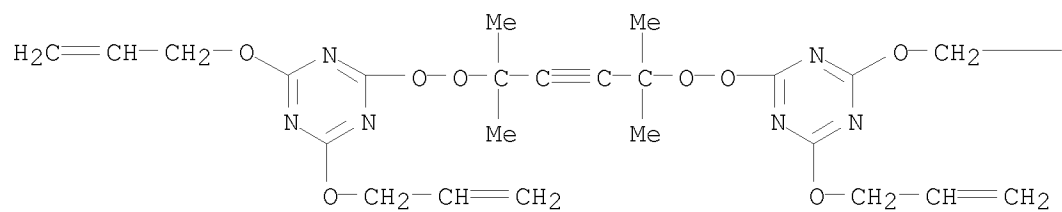
STN-10581863

PAGE 1-B



RN 115413-52-0 CAPLUS  
CN 1,3,5-Triazine, 2,2'-[(1,1,4,4-tetramethyl-2-butyne-1,4-diyl)bis(dioxy)]bis[4,6-bis(2-propenyloxy)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

